

Abstract

A method of estimating the location of a wireless terminal that is within a structure is disclosed. In some embodiments, the method can be practiced without the addition of hardware to either the wireless terminal or to base stations of the telecommunications system. In the illustrative embodiment, an *indoor* radio frequency-signal propagation model is used to correct signal-strength predictions that are obtained from an outdoor radio frequency-signal propagation model. The indoor radio frequency model accounts for a "boundary" loss, which occurs as a radio signal first penetrates a structure (*e.g.*, building, *etc.*), and/or, optionally, "interior" losses, which are experienced as the radio signal propagates further into the structure. Furthermore, in some embodiments, the model accounts for the effect of building orientation (*e.g.*, the surface of the building, *etc.*) relative to outdoor transmitters (*e.g.*, base stations, *etc.*).